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# PROBLEM OF THE MECHANISM OF THE EFFECT OF HYDROGEN SULFIDE

Ya. R. Savinskiy

This study was carried out on rabbits which were subcutaneously injected with sodium sulfide equivalent to 50 milligrams of hydrogen sulfide per kilogram weight. The animals died or were killed during the first hour after the injection. Studies of the liver, kidney, heart, brain, and muscular tissues for oxidation and dehydrogenation capacity and also for the content of vitamins C, B<sub>1</sub>, B<sub>2</sub> were then conducted.

It was established that all these organs indicated some depression in the oxidation capacity and also a significant depression in their dehydrogenation processes. The percentage of vitamin C was sharply increased, and in some organs this increase resulted in a content which was twice as high as in the controls.

The percentages of vitamin B<sub>1</sub> and B<sub>2</sub> varied insignificantly and these changes were not permanent. The toxic effects of hydrogen sulfide were chiefly due to its depressive action on the anoxidative phase in cell respiration; and, to a certain degree, to depressing the processes of oxygen respiration. The increase in the percentage of vitamin C in the tissues of the animals poisoned by hydrogen sulfide is due to the increase in the percentage of reducing substances in their blood.

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